



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

LETTERS TO THE EDITOR

Letters to the Editor are encouraged and may be submitted at jenonline.org where submission instructions can be found in the Author Instructions.

Integrated Infection Control Strategy to Minimize Hospital-Acquired Infection During Outbreak of Coronavirus Disease 2019 Among ED Health Care Workers



Dear Editor:

On February 11, 2020, the World Health Organization formally named the disease triggered by the 2019-novel coronavirus as coronavirus disease 2019 (COVID-19). As a newly discovered infectious disease, the outbreak and spread of COVID-19 shocked the whole world. In just a short period of 2 months, more than 80,000 people in China and a total of 12,669 people in 76 countries outside of China became infected.¹ Owing to the lack of sufficient understanding of and complete protection from COVID-19 in the early stage, more than 3,000 health care workers (HCWs) have been infected.^{2,3} The number of infections and deaths have exceeded those of the severe acute respiratory syndrome outbreak in China in 2002.^{3,4} Patients who complain of fever, cough, and sore throat may come to the emergency department. As a high-risk department for receiving such patients, a large number of diagnostic, therapeutic, and nursing operations will be directly exposed to the patients' respiratory secretions. To protect HCWs and noninfected patients from potential 2019-novel coronavirus infection, the West China Hospital (WCH) and its emergency department took a series of related infection control measures. We summarize the experiences during the outbreak, which might help other emergency departments to formulate personalized infection control programs and prevent the spread of hospital-acquired infection.

- With the development of the outbreak, WCH immediately set up a transdepartment emergency infection control team, which was responsible for infection control and protection management of the entire hospital. All the regulatory requirements were implemented actively by the emergency department.
- Triage strategies were adjusted and optimized. The management process as indicated in the [Figure](#) was activated.

- The epidemic fever clinic management team was set up. The fever clinic pre-examination process was formulated along with the COVID-19 surveillance report process and disinfection requirements after the disposition of suspected or confirmed patients. Meanwhile the layout and facilities of the fever clinic were adjusted, 4 tents were rapidly set up with emergency medical technicians to expand the space scope of the fever clinic, and an emergency fever rescue room was set up to treat severe fever patients. In addition, the hospital-acquired team of the emergency department conducted a number of related theories and skills training.
- After the evaluation of the existing human resources and job needs, WCH deployed HCWs in the hospital and the emergency department, combined with the internal region and postdeployment of the department. WCH initiated volunteer service on the entire hospital staff (clinical HCWs, administrative logistics department), who are mainly responsible for entrance and exit management and medical guidance.
- The management of protective equipment and materials was improved. All protective materials were managed at the 3 levels of hospital, department, and region, and special personnel of the general nurse was responsible for them. Additionally, the general nurse carefully planned and distributed materials according to the requirements of the post's (fever triage, fever clinic, injection room, rescue room, emergency intensive care unit) protection levels.
- It is key to continue to secure the entrances and exits of the center. To decrease the density of patients and reduce the crowding of the emergency department, we strictly implemented the companionship management system established by our department. Nonemergency patients are strictly prohibited from entering the center, no more than 2 people can be accompanied by emergency patients under special conditions, no accompanying and no visitation in the rescue room and intensive care unit is permitted, and the companionship of observation room patients is strictly controlled to 1 person carrying an accompanying certificate.

As of March 4, 2020, a total of 6,103 fever cases visited our hospital, and 26 cases were finally confirmed as

J Emerg Nurs 2020;46:424-7.
0099-1767

Copyright © 2020 Emergency Nurses Association. Published by Elsevier Inc. All rights reserved.

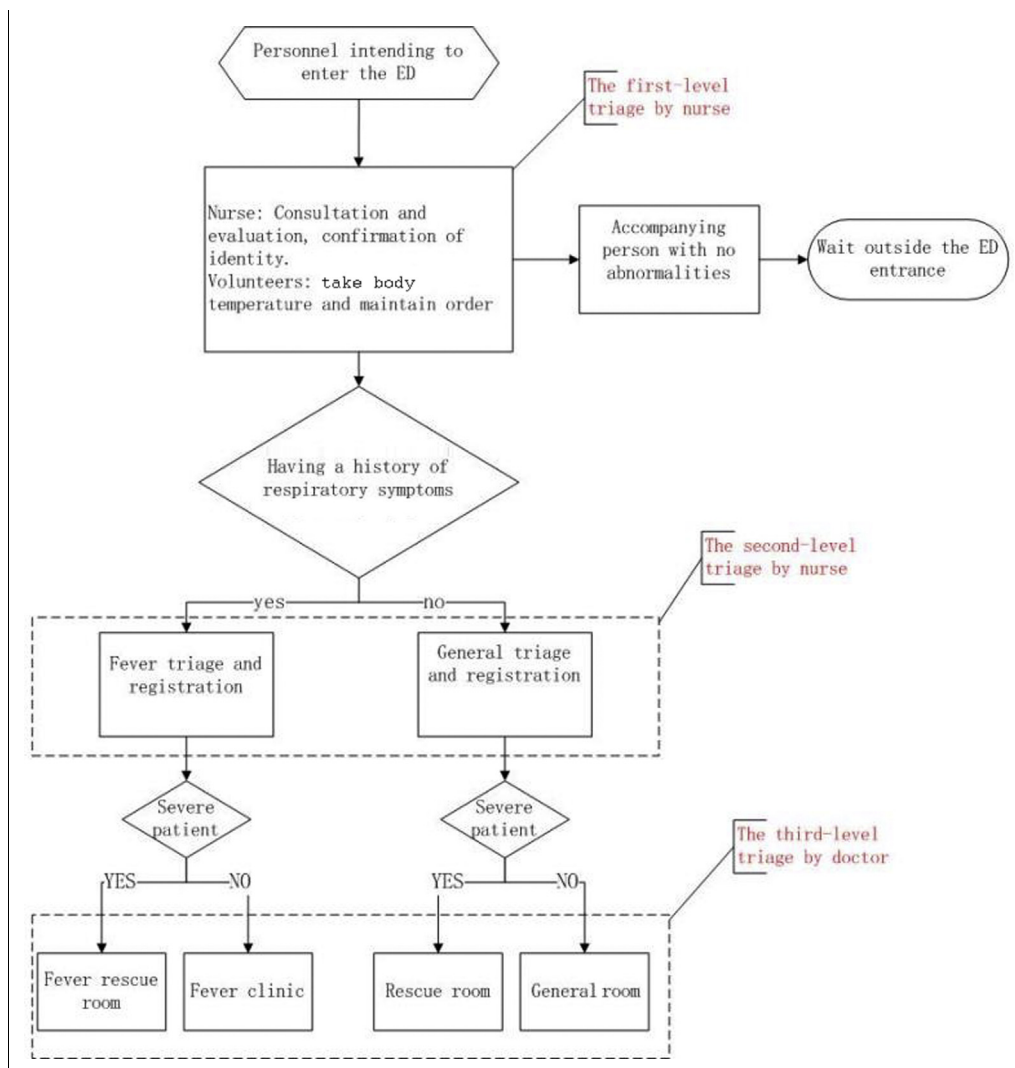


FIGURE
Three-level pre-examination and triage.

COVID-19. Up to now, no hospital-acquired infection has occurred in WCH and its emergency department. We hope the experiences in infection prevention and control will benefit more HCWs and patients.—*Ling Wang, BSc, Emergency Department of West China Hospital, Sichuan University, Chengdu, China; Xiaoli Chen, MSc, Institute of Disaster Medicine, Sichuan University, Chengdu, China; and Lei Ye, MSc, Emergency Department, West China Hospital, Sichuan University, Chengdu, China; E-mail: yelei1117@126.com*

<https://doi.org/10.1016/j.jen.2020.03.016>

REFERENCES

1. World Health Organization. Coronavirus disease 2019 (COVID-19) situation report - 44. Available at: https://www.who.int/docs/default-source/coronavirus/situation-reports/20200304-sitrep-44-covid-19.pdf?sfvrsn=93937f92_4. Accessed March 6, 2020.

2. Gorbalenya AE, Baker SC, Baric RS, et al. Severe acute respiratory syndrome-related coronavirus: the species and its viruses-a statement of the Coronavirus study group. Preprint. Posted online February 7, 2020. bioRxiv 937862. <https://doi.org/10.1101/2020.02.07.937862>. Accessed March 6, 2020.
3. National Health Commission. The latest situation of the new coronavirus pneumonia epidemic situation as of 14:00 on March 1 (in Chinese). Available at: <http://www.nhc.gov.cn/yjb/s7860/202003/5819f3e13ff6413ba05fdb45b55b66ba.shtml>. Accessed March 2, 2020.
4. China News Network. Report on disease control and prevention in China: more than 3,000 medical workers were infected with novel coronavirus (in Chinese). Available at: <https://baijiahao.baidu.com/s?id=1658796071845525900&wfr=spider&for=pc>. Accessed March 6, 2020.